

**In the Claims:**

Please amend the claims to read as follows:

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1. (AMENDED) A laser driver for generating coherent light comprising:  
at least two laser diodes mounted in combination with a single thermo-electric temperature control means; and  
a microprocessor for controlling and/or monitoring the activation of said laser diodes and said thermo-electric temperature control means;  
wherein said laser diodes are operable to simultaneously provide laser beams.

Sub 47  
2. (AMENDED) A method of controlling and/or monitoring a laser diode with a microprocessor having memory storage of data, the method comprising:  
storing in said memory power-safety parameters of said laser diode with said microprocessor during operation of said laser diode, wherein one of said parameters is laser output power;  
continuously monitoring said laser output power; and  
disabling operation of said laser diode whenever said one or more parameters are exceeded.

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4. (AMENDED) The method of claim 2 wherein said parameters include laser pulse duration and laser pulse peak output power during pulsed mode laser operation.

Sub (37)  
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12. (AMENDED) A method of controlling a laser diode comprising:  
activating a control circuit that includes said laser diode at a current level less than the current threshold to activate said laser diode;  
activating said laser diode by increasing the current in said control circuit above said threshold for a specified duration; and  
reducing said current below said threshold to deactivate said laser diode.

13. (AMENDED) A laser driver control system comprising:  
at least one laser diode, a circuit for sensing the current through said laser diode, comparator for continuously comparing said current to a predetermined value, and